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07-16-91

PTO/SB/05 (08-00)

A. d for use through 10/31/2002. OMB 0651-0032

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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

Attorney Docket No. 11460-112

First Inventor or Application Identifier Michael E. Mack

Title GAS CLUSTER ION BEAM SIZE DIAGNOSTICS AND WORKPIECE PROCESSING

Express Mail Label No. EL377528809US

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

APPLICATION ELEMENTS

See MPEP chapter 600 concerning design patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
Applicant claims small entity status. See 37 CFR 1.27.
2. ☐ Specification [Total Pages 34]
(preferred arrangement set forth below)
- Descriptive title of the invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C.113) [Total Sheets 19]
5. Oath or Declaration (unexecuted) [Total Pages 2]
a. ☐ Newly executed (original or copy)
b. ☐ Copy from a prior application (37 CFR 1.63 (d))
(for a continuation/divisional with Box 17 completed)
i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

ADDRESS TOCommissioner for Patents
Box Patent Application
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
a. ☐ Computer Readable Form (CRF)
b. Specification Sequence Listing on:
i. ☐ CD-ROM or CD-R (2 copies); or
ii. ☐ paper
c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATIONS PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. §3.73(b) Statement of Power of Attorney (when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☒ Other: Check for \$1,140.00 (filing fee/extra claims).

17. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below, and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No: ____ /

Prior application information: Examiner ____

Group / Art Unit:

For **CONTINUATION** or **DIVISIONAL APPS** only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS☒ Customer Number or Bar Code Label

26486

or ☐ Correspondence address below

(Insert Customer No. or Attach bar code label here)

Name

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Jacob N. Erlich

Registration No. (Attorney/Agent)

24,338

Signature

Date

July 13, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

FEE TRANSMITTAL for FY 2001		Complete if Known		
		Application Number	N/A	
Patent fees are subject to annual revision.		Filing Date	Herewith	
		First Named Inventor	Michael E. Mack	
		Examiner Name	N/A	
		Group / Art Unit	N/A	
TOTAL AMOUNT OF PAYMENT	(\$)	1,140.00	Attorney Docket No.	11460-112

METHOD OF PAYMENT (check one)		FEE CALCULATION (continued)			
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:	3. ADDITIONAL FEES				
Deposit Account Number	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	
03-2410 (Order No. 11460-112)	105 130	205 65	Surcharge - late filing fee or oath		
Deposit Account Name	127 50	227 25	Surcharge - late provisional filing fee or cover sheet.		
Perkins, Smith & Cohen LLP	139 130	139 130	Non-English specification		
<input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	147 2,520	147 2,520	For filing a request for reexamination		
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27	112 920*	112 920*	Requesting publication of SIR prior to Examiner action		
2. <input checked="" type="checkbox"/> Payment Enclosed:	113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action		
<input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other	115 110	215 55	Extension for reply within first month		
FEE CALCULATION		116 390	216 195	Extension for reply within second month	
1. BASIC FILING FEE	117 890	217 445	Extension for reply within third month		
Large Entity Fee Code (\$)	118 1,390	218 695	Extension for reply within fourth month		
Small Entity Fee Code (\$)	128 1,890	228 945	Extension for reply within fifth month		
Fee Description	119 310	219 155	Notice of Appeal		
101 710 201 355 Utility filing fee	120 310	220 155	Filing a brief in support of an appeal		
106 320 206 160 Design filing fee	121 270	221 135	Request for oral hearing		
107 490 207 245 Plant filing fee	138 1,510	138 1,510	Petition to institute a public use proceeding		
108 710 208 355 Reissue filing fee	140 110	240 55	Petition to revive - unavoidable		
114 150 214 75 Provisional filing fee	141 1,240	241 620	Petition to revive - unintentional		
SUBTOTAL (1)	142 1,240	242 620	Utility issue fee (or reissue)		
(\$)	143 440	243 220	Design issue fee		
2. EXTRA CLAIM FEES	144 600	244 300	Plant issue fee		
Total Claims 35 -20 = 15 X 18 = 270	122 130	122 130	Petitions to the Commissioner		
Independent Claims 5 -3 = 2 X 80 = 160	123 130	123 130	Petitions related to provisional applications		
Multiple Dependent X = 0	126 180	126 180	Submission of Information Disclosure Stmt		
Large Entity Fee Code (\$)	581 40	581 40	Recording each patent assignment per property (times number of properties)		
Small Entity Fee Code (\$)	146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))		
Fee Description	149 710	249 355	For each additional invention to be examined (37 CFR § 1.129(b))		
103 18 203 9 Claims in excess of 20	179 710	279 355	Request for Continued Examination (RCE)		
102 80 202 40 Independent claims in excess of 3	169 900	169 900	Request for expedited examination of a design application		
104 270 204 135 Multiple dependent claim, if not paid	Other fee (specify)				
109 80 209 40 ** Reissue independent claims over original patent	*Reduced by Basic Filing Fee Paid				
110 18 210 9 ** Reissue claims in excess of 20 and over original patent	SUBTOTAL (3)			(\$)	
SUBTOTAL (2)	(\$)			0	
**or number previously paid, if greater; For Reissues, see above					

SUBMITTED BY		Complete (if applicable)	
Name (Print/Type)	Jacob N. Erlich	Registration No. Attorney/Agent	24,338
Signature		Telephone	(617) 854-4000
		Date	July 13, 2001

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Express Mail Label No: EL377528809US

Date of Deposit: July 13, 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

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INVENTION TITLE: GAS CLUSTER ION BEAM SIZE DIAGNOSTICS AND
WORKPIECE PROCESSING

ASSIGNEE: Epion Corporation

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To: Commissioner for Patents
BOX PATENT APPLICATION
Washington, D.C. 20231

Sir:

Your applicants, named above, hereby requests acceptance of the enclosed regular utility application entitled as stated above pursuant to 35 U.S.C. § 111(a).

Patented by the U.S. Patent and Trademark Office